PŦ	0-14	149		Application No.		Applicant(s) Shilin Chen		
	Info	rmation Disclosure In an Applicatio		Docket Number 074263.0211 (SC-98-025 C3-B)	Group Art Unit Filing D Unassigned Janua		ate ary 27, 2004	
			U.	S. PATENT DOCUME	NTS			
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING	DATE
Ŋ	A	1,847,981	03/01/1932	C.E. Reed			07/23/	1930
1	В	2,117,679	05/17/1938	C.E. Reed	255	71	12/27/	1935
\vdash	С	2,122,759	07/05/1938	F.L. Scott	255	71	07/\6/	1936
1	D	2,132,498	10/11/1938	H.C. Smith	255	71	07/22/	1936
+	E	2,165,584	07/11/1939	H.C. Smith et al.	255	71	07/22	1936
+	F	2,230,569	02/04/1941	J.H. Howard et al	255	71	12/20/	939
\vdash	G	2,496,421	02/07/1950	J.C. Stokes	255	71	05/07/	1946
\vdash	Н	2,728,559	12/27/1955	E.G. Boice et al.	255	334	12/10	1951
	1	2,851,253	09/09/1958	E.G. Boice	255	347	04/27/	1954
-	J	4,187,922	02/12/1980	Phelps	175	374	05/12/	1978
+	K	4,334,586	06/15/1982	Schumacher	175	374	06/05/	1980
+	L	4,343,371	08/10/1982	Baker III, et al	175	329	04/28/	1980
+	M	4,393,948	07/19/1983	Fernandez	175	374	04/01/	1981
\vdash	N	4,408,671	10/11/1983	Munson	175	377	02/19/	/1982
-	0	4,427,081	01/24/1984	Crawford	175	376	01/19/	/1982
\vdash	P	4,611,673	09/16/1986	Childers et al	175	340	11/21/	/1983
1	Q	4,657,093	04/14/1987	Schumacher	175	353	02/03/	1982
	l		FOR	EIGN PATENT DOCU	MENTS			
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSI YES	ATIO
M	R	SU 1768745 A1	10/15/1992	SU	E 21 B	10/16	X	
1	S	SU 1441051 A2	11/30/1988	SU	E 21 B	10/16	X	
t	T	EP 0511547 A2	04/14/1992	EPO	E 21 B	10/16	Х	
\vdash	U	EP 0511547 A3	04/14/1992	EPO	E 21 B	10/16	Х	1
/	V	EP 0511547 B1	04/14/1992	EPO	E 21 B	10/16	х	
ΞX	AMI	ver ywal	1	DATE CO	ONSIDERED	·		
EX.	AMINE	R: Initial if citation considered Include copy of this form wit	d, whether or not cit	ation is in conformance with MPEI	§ 609. Draw line th	rough citation if not	in conforman	ce and n

0-14	149		Application No.	·	Applicant(s)		Page 2
Info			Docket Number 074263.0211 (SC-98-025 C3-B)	Group Art Unit Filing Date			, 2004
		U.	S. PATENT DOCUME	8			
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLAS	S FILING	G DAT
W	4,815,342	03/25/1989	Brett et al.	76	108	1/2/15	/1987
X	4,848,476	07/18/1989	Deane et al	175	340	02/29	/1988
Y	5,137,097	08/11/1992	Fernandez	175	228	10/30	1990
Z	5,197,555	03/30/1993	Estes	175	374	05/22	1991
AA	5,224,560	07/06/1993	Fernandez	175	374	05/18	/1992
AB	5,311,958	05/17/1994	Isbell et al	175	341	09/23	/1992
AC					24		/1991
		<u> </u>					
	, ,						i
				·		_	<u> </u>
						1 1	1
AG		03/07/1995					1
AH	5,415,030	05/16/1995	Jogi et al.	73	151		1
ΑĬ	5,416,697	05/16/1995	Goodman	364	422	07/31	/1992
AJ	5,421,423	06/06/1995	Huffstutler	175	374	03/22	/1994
AK	5,704,436	. 01/06/1998	Smith et al	175	27	03/25	/1996
		FORI	EIGN PATENT DOCUM	MENTS			
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLAS		LATIC
AL	GB 2241266 A	08/28/1991	GB	E21B	10/46	х	
	OTHER DO	CUMENTS (Inc	luding Author, Title, Source,	and Pertinent P	ages)	DA	TE
AM	<u> </u>						
AO	D. Ma, D. Zhou & R. Deng, The Computer Stimulation of the Interaction Between Roller Bit and Rock, (1995) Shilin Chen, Linear and Nonlinear Dynamics of Drillstrings, (1994-1995)						
AP	D. Ma, & J.J. Azar, Dynan	nics of Roller Cone	Bits, (12/1985)				
AQ				of Baller Care St	- (4 <u>0</u> 80)		
AR AS					s, (1909)		
AT	L.E. Hibbs, Jr., et al, Diam	ond Compact Cut	ter Studies for Geothermal Bit D	<i>Besign,</i> (Nov. 1978)		
MIN	er ywal	h	DATE CO	1	105		
	W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT	DOCUMENT NO.	U. DOCUMENT NO. DATE W 4,815,342 03/25/1989 X 4,848,476 07/18/1989 Y 5,137,097 08/11/1992 Z 5,197,555 03/30/1993 AA 5,224,560 07/06/1993 AB 5,311,958 05/17/1994 AC 5,318,136 06/07/1994 AD 5,341,890 08/30/1994 AE 5,370,234 12/06/1994 AF 5,372,210 12/13/1994 AG 5,394,952 03/07/1995 AH 5,415,030 05/16/1995 AJ 5,421,423 06/06/1995 AK 5,704,436 01/06/1998 FORE DOCUMENT NO. DATE AD D. Ma, B. J. J. Azar, Dynamics of Roller Cone AQ D. K. Ma & S. L. Yang, Kinematics of the Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AQ D. K. Ma & S. L. Yang, Kinematics of the Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR D. Ma & J. J. Azar, Dynamics of Roller Cone AR Russian bit catalog listing items "III 190,5 T-1 AT L.E. Hibbs, Jr., et al. Diamond Compact Cut	Docket Number	Docket Number (074263.0211 (SC-98-025 C3-B)	Shilin Cher	Shilin Chen

PT	PTO-1449			Application No.	Applicant(s) Shilin Chen			
	Info	rmation Disclosure In an Applicatio		Docket Number 074263.0211 (SC-98-025 C3-B)	Group Art Unit Unassigne	F	filing Date January 27,	2004
			Ü.	S. PATENT DOCUMEN	NTS			
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLAS	S FILING	DATE
36	AU	5,715,899	02/10/1998	Liang et al	175	374	02/02/	1996
<u> </u>	AV	5,730,234	03/24/1998	Putot	175	50	05/14/	1996
+	AW	5,794,720	08/18/1998	Smith et al	175	40	03/25/	1996
H^-	AX	5,812,068	09/22/1998	Wisler et al	340	855.5	12/12/	1995
\vdash	AY	5,813,480	09/29/1998	Zaleski, Jr., et al	175	40	12/03	1996
\vdash	AZ	5,813,485	09/29/1998	Portwood	175	430	06/21/	996
+	ВА	5,839,526	11/24/1998	Cisneros, et al.	175	431	04/04/	1997
H	ВВ	6,002,985	12/14/1999	Stephenson	702	13	05/06/	1997
	ВС	6,012,015	01/04/2000	Tubel	702	6	09/18/	1997
\vdash	BD	6,021,377	02/01/2000	Dubinsky et al	702	9	10/23/	1996
\vdash	BE	6,044,325	03/28/2000	Chakravarthy et al	702	7	07/21/	1998
\vdash	BF	6,057,784	05/02/2000	Schaaf et al	340	854.4	09/02/	1997
H	BG	6,095,262	08/01/2000	Chen	175	57	08/31/	1999
	ВН	6,109,368	09/29/2000	Goldman et al	175	39	1 /13/	1998
\parallel	Bī	6,213,225	04/10/2001	Chen	175	57	08/31/	1999
H^-	BJ	6,241,034	06/01/2001	Steinke et al	175	331	09/03/	1998
1	ВК	6,401,839	06/01/2002	Chen	175	57	03/10/	2000
			FOR	EIGN PATENT DOCUN	MENTS			
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLAS	S TRANSI	ATION
	BL							
	ВМ							
		OTHER D	OCUMENTS (I	ncluding Author, Title, Source	e, and Pertinent	Pages)	DA	ATE'
3W	BN	Textbook Series (1991)	d Drilling Engineering", Soc				
3/1	ВО	J. P. Nguyen, "Oil and French original 1993)	Gas Field Dev	elopment Techniques: Drillir	ng" (translation	1996, from		
EX	AMIN		,	DATE CO	DNSIDERED	7		
EX	AMINE	R: Initial if citation considered	I, whether or not cit	ation is in conformance with MPEP	\$ 609. Draw line the	rough citation if r	not in conforman	ce and not
сол	sidered.	Include copy of this form with NT AND TRADEMARK OF	h next communicati	on to the applicant.				

PT	0-14	49		Application No.		Applicant(s) Shilin Cl	h07		age 4 01 4
	Info	mation Disclosure In an Application		Docket Number 074263.0211 (SC-98-025 C3-B)	Group Art Uni Unassigne	t	Filing	g Date uary 27, 2	2004
			U.S	S. PATENT DOCUMENT	rs			<u> </u>	
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLA	\SS	FILING	DATE
211	BP	6,412,577	07/02/2002	Chen	175	57		08/01/2000	
3W 3W	BQ	6,527,068	03/01/2003	Singh et al	175	431		08/16/	2000
1	BR								
			FORE	IGN PATENT DOCUM	ENTS				
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLA	ASS	TRANSL YES	ATION
	BS								
			LITIG	ATION DOCUMENTS				DA'	TE
311	BT	Plaintiff's Original Comp United States District Co 02CV269, Halliburton E		09/06/200	2				
	BU	Answer and Counterclain for the Eastern District of Services, Inc. v. Smith Int	urt	03/14/2003					
	BV	Response of Plaintiff and Counterclaim Defendant to Defendant's Counterclaim of Declaratory Judgment, filed April 3, 2003, in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, Halliburton Energy Services, Inc. v. Smith International, Inc., 3 pages							3
\sqrt{V}	BW	First Amended Answer at District Court for the Eas	nd Counterclaim tern District of To	of Smith International, filed Octobras, Sherman Division, Civil Ad International, Inc., 8 pages	ober 9, 2003, in	the United St	ates	10/09/200	3
			OT	HER DOCUMENTS or, Title, Source, and Pertinen	t Pages)			DA'	TE
3W	BX			Series, edited by Charles Ki					
1	BY	"Drilling Mud", part of	f Rotary Drilling	g Series, edited by Charles Ki	rkley (1984)	·			•
	BZ	H.G. Benson, "Rock Bethe pacific coast district May, 1956	it Design, Select et, American Pe	tion and Evaluation", present troleum Institute, Division of	ed at the spring Production, L	g meeting of os Angeles,	-		
1	CA	J.C. Estes, "Selecting to 1971, pp1359-1367	·	ry Rock Bit", Journal of Petro					
П	СВ	Sikarskie, et. al., "Pene Engineers, Rock Mech	etration Problemanics Symposiu	ns in Rock Mechanics", Amer um. 1973	rican Society o	f Mechanica	al		
	CC	Dykstra, et. al., "Exper SPE 28323, 1994	rimental Evalua	tions of Drill String Dynamic					
V	CD	Kenner and Isbell, "Dynamic Analysis Reveals Stability of Roller Cone Rock Bits", SPE 28314, 1994							
	CE								
	GF								
1	AMI MW	DATE CONSIDERED	rilos						
EX	MINER			ion is in conformance with MPEP §	609. Draw line th	rough citation	if not	in conforman	ce and not
		T AND TRADEMARK OFF							

PTO-1449

Information Disclosure Citation E In Application

Application No. 10/765,746 Docket Number

Applicant(s) Shilin Chen

Group Art Unit Filing Date

074263.0211 (SC-98-025 C3-B) 3672

Jan. 27, 2004

U.S. PATENT DOCUMENTS

							
	STEN.	TABLEUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
2W	A	1,209,299	12/19/1916	Hughes			12/30/1914/
1	В	1,263,802	04/23/1918	Reed			08/13/1917
	С	1,394,769	10/25/1921	Sorensen		·	05/18/1920
1	D	4,056,153	11/01/1977	Miglierini	175	376	07/16/1976
1	.E	4,627,276	12/09/1986	Burgess et al.	. 73	151	12/27/1984
\top	F	5,010,789	04/30/1991	Brett et al.	76	108.2	10/06/1989
	G	5,042,596	08/27/1991	Brett et al.	175	57	07/12/1990
	Н	5,131,478	07/21/1992	Brett et al.	175	57	06/10/1990
\top	I	5,216,917	06/08/1993	Detournay	73	151	07/11/1991
\top	1	RE 34,435	11/09/1993	Warren et al	175	398	03/11/1992
1	К	5,305,836	04/26/1994	Holbrook et al.	175	39	04/08/1992
	L	. 5,456,141	10/10/1995	Но	76	108.2	11/12/1993
	М	5,605,198	02/25/1997	Tibbitts et al.	175	432	04/28/1995
\sqcap	N	5,767,399	06/16/1998	Smith et al.	73	152.11	03/25/1996
П	0	6,142,247	11/07/2000	Pessier	175	340	07/19/1996
V	P	6,348,110	02/19/2002	Evans	148	528	04/05/2000

FOREIGN PATENT DOCUMENTS

۲			DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSI	
L			DOCUMENT NO.	DATE	COUNTRI	CDASS	SOBCERGO	YES	NO
3	N	Q	1654515 A1	03/29/1988	SU.	E 21 B	10/16	х	
		R	1691497 A1	05/30/1988	SU	Ę 21 B	10/16	х	
		s	0384734 A1	08/29/1990	EPO	E 21 B	10/46	Х	
		Т	2367578 A	04/10/2002	GB	E 21 B	10/56	Х	-
Ī	1	U	2367579 A	04/10/2002	GB	E 21 B	10/56	x	

EXAMINER	. 1	DATE CONSIDERED	/
	Sylvall	7/27	105

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

U.S. PATENT AND TRADEMARK OFFICE

Page 2 of 3 Applicant(s) Application No. PTO-1449 Shilin Chen 10/765.746 Filing Date Docket Number Group Art Unit Information Disclosure Citation In an Application 3672 Jan. 27, 2004 074263.0211 (SC-98-025 C3-B) U.S. PATENT DOCUMENTS **SUBCLASS** FILING DATE **CLASS** DOCUMENT NO. DATE NAME 152.02 09/27/2000 Civolani et al 73 6,349,595 02/26/2002 0608/2000 175 374 В 6,374,930 04/23/2002 Singh et al. 703 03/13/2000 02/04/2003 10 С 6,516,293 Huang et al. 09/0/11/1999 03/18/2003 175 371 D 6,533,051 Singh et al. 03/08/2003 03/11/2004 175 374 E 2004/0045742 A1 Çhen /03/08/2003 175 341 F 06/03/2004 2004/0104053 A1 Chen G H I DATE OTHER DOCUMENTS (Including Author, Title, Source, and Pertinent Pages) M.C. Sheppard, et al., "Forces at the Teeth of a Drilling Rollercone Bit: Theory and Experiment". Proceedings: 1988 SPE Annual Technical Conference and Exhibition; Houston, TX, USA, Oct. 2-5, 1988, Vol. Delta, 1988, pp 253-260 18042, XP002266080, Soc. Pet Eng AIME Pap SPE 1988 Publ by Soc of Petroleum Engineers of AIME, Richardson, TX, USA T.M. Warren et al, "Drag-Bit Performance Modeling", SPE Drill Eng. June 1989, Vol. 4, No. 2, pp K 119-127 15618, XP002266079 T.M. Warren, "Factors Affecting Torque for A Roller Cone Bit", JPT J PET Technol Sept. 1984, Vol. 36, No. 10, pp 1500-1508, XP002266078 D.K. Ma, A New Method of Description of Scraping Characteristics of Roller Cone Bit, Petroleum M Machinery, July, 1988 (English translations with original Chinese version attached) N Wilson C. Chin, Wave Propagation in Petroleum Engineering (1994) Brochure entitled "Twist & Shout", (SB2255.1001), 4 pages B.L. Steklyanov, et al, "Improving the Effectiveness of Drilling Tools," Series KhM-3, Oil Industry Machine Building, pub. Central Institute for Scientific and Technical Information and Technical and Economic Research on Chemical and Petroleum Machine Buidling, Tsintikhimneftemash, Moscow, 1991 (translated from Russian) (undertal) Q Energy Balanced Series Roller Cone Bits, www.halliburton.com/oil gas/sd1380.jsp (undated) Ashmore, et al., Stratapax™ Computer Program, Sandia Laboratories, Albuquerque, NM, (76 R

EXAMINER DATE CONSIDERED 7/27/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

F.A.S.T.TM Technology Brochure entitled "Tech Bits", Security/Dresser Industries, Sept. 17, 1993 (1

P	TO-1	449		Application No. 10/765,746		Applicant(s) Shilin Chen				
	Info	rmation Disclosure	Citation	Docket Number	Group Art Uni		Filing	Date		
		In an Application		074263.0211	3672		Jan	. 27, 20	04	
				(SC-98-025 C3-B)	l .					
			τ	J.S. PATENT DOCUMEN	NTS					
		DOCUMENT NO.	DATE	NAME	CLAS	s subc	LASS	FILING DATE		
	Α							************		
	В									
	С									
FOREIGN PATENT DOCUMENTS										
DOCUMENT NO. DATE COUNTRY CLASS SUBCLASS T										
	D									
	E									
	F									
	OTHER DOCUMENTS (Including Author, Title, Source, and Pertinent Pages)								TE	
36)	G	Sii PLUS Brochure enti	tled "The PDC	Plus Advantage", from Smith	International	(2 pages)		Cundited	<i>t</i>)	
	Н	Specification sheet entit B.V., The Hauge, The N		uality Sub-Specification", She 91 (2 Pages)	ell Internation	ale Petroleum	Mij.			
	I	Brochure entitled "FM2 Dresser Industries, Inc.,		norrow's Technolgoies for To	day's Drilling.	", Security D	BS,			
J	J			Steel Body Technology Advantages, Inc., 1997 (6 pages)	ances PDC Bi	t Performanc	e and			
	к		***************************************							
	L							2		
	М							-		
	N	·	-							
	0									
	P	·								
	Q	Q								
	R									
PV	S	TED			CIDENES /					
EX	AMIN	ner Alalal	1	DATE CON	/ /	· 2_S			,	
FX	MINE	R: Initial if citation considered	whether or not cit	ation is in conformance with MPEP 8	11001		if not in	conformano	e and not	

		101.6	N					
	. •	June -		A 6 14 14			1	Page 1 of 1
рт	O-1449	DEC 1 5 MIN	E E	Application No.	Applicant(s)	- <u>-</u>	·····	
۱ د			y	10/765,746	Shilin Cher			
,	Infor	mation Distrios		Docket Number	Group Art	Group Art Unit Filing Date		
,		in an Applic	ation	074263.0211	2128	2128 January		
			,,	U.S. PATENT DOCUMENTS	•			
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILIN	IG DATE
3W	Α.	2004/0167762	08/26/04	Chen	703	10	_02/2	6/2004
	8.							
	C.							
	D.							
	E.				•			
	F.							
	G.							
			F	OREIGN PATENT DOCUMEN	ITS			
	·	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRAN	SLATION
ZU	H.	CN 2082755U	8/14/91	China	E 21B	10/50	X	
50	I.	0.1.2002.000				/		
	J.							
				NON-PATENT DOCUMENTS	S			
			DOCUMENT (Includi	ng Author, Title, Source, and	l Pertinent Pages)	· · · · · · · · · · · · · · · · · · ·	C	DATE
W	K.	Communication of a	Notice of Opposition	on filed October 4, 2004 with	h the European Pat	ent Office	10/0	04/2004
1	L.	Communication of a	Notice of Opposition	on filed October 21, 2004, w	rith the European P	atent Office	10/2	21/2004
	M.	Brief Communication	n from European Pa	atent Office enclosing letter	from the opponent	of October 13,	10/2	22/2004
П	N.		of Oil Filed Equipme	ent & Services, 27th Revision	on 1666-67 Volume	3	•	1966
	О.			Il grading, Selection and Ap			10/	16/1980
	۴.			Sharply into Drilling Costs,	, South African Min	ing & Engineering	3.	/1979
Ť	Q.							
	R.							
				LITIGATION DOCUMENTS				
W	S.	the Eastern District	of Texas, Sherman	signed February 13, 2004, Division, Civil Action No. 4- c., 37 pages (including fax o	-02CV269, Hallibur	s District Court for ton Energy	02/	19/2004
	т.	Final Judgment of J	udge Davis, signed exas, Sherman Divi	August 13, 2004, in the Unision, Civil Action No. 4-020	ited States District	Court for the Energy Services,	08/	13/2004
1	U.			einke and Exhibits SS-1 to S	SS-6	······	10/	13/2004
	V.							

EXAMINER DATE CONSIDERED 105

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

	Fy		<u>٠ بادعار په</u>			Page 1 of
PTO-14	46	2	Application No.	Applicant(s)		
	(_ JAN 3 1 2005)	Olandina	10/765,746	Shilin Chen		
inte	okmation Disclosi	ure Citation	Docket Number	Group Art l		
	MAGENTA		074263.0211	2128	Januar	y 27, 2004
			U.S. PATENT DOCUMENTS	.		
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
Α						
В			•			
С	·					
D				·		
Ε	·					
		FO	REIGN PATENT DOCUMEN	ITS		
-	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
F						
G					·	
н					<u>.</u>	
1						
	•		NON-PATENT DOCUMENTS	•		
	D	OCUMENT (Including	g Author, Title, Source, and	Pertinent Pages)		DATE
,WJ	pages	·	iciples and Practice, Unive			1985
WK	Brief Communication 2, 2004 (074263.028		ent Office enclosing letter	from the opponent o	lated December	
L						
м						
N		-				
0						
Р						
Q						
R					,	
s		·				
Т						
υ						
EXAMINE	er Jh	Sal		DATE CONSIDER	127/OS	
EXAMINE	ER: Initial if citation considere Include copy of this form with	d, whether or not citation	n is in conformance with MPEP			nformance and not
	1067 01 010 10111 111					

U.S. PATENT AND TRADEMARK OFFICE

٠,٠٠٠		Application No.	Applicant(s)			raye i oi
9	IPA				•	
rmation Disclos	sure Citation	10/765,746 Docket Number			ate	
in an Applic	L4: `	: .N				004
	MAY 23 ZUD			Janua	11 y 21, 2	004
1	PADENIST			I		
ļ	 			ļ 		IG DATE
					- - - - - - - - - - 	28/1979
			 		_ 	2/1/986
					/	21/1992
5,291,807	03/08/1994	Vanderford et al.	76	108.2	98/1	10/1992
,	· · · · · · · · · · · · · · · · · · ·	FOREIGN PATENT DOCUMEN			TOAN	CI ATION
DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
		·				
						L
		NON-PATENT DOCUMENTS	.			····
	DOCUMENT (Includ	ing Author, Title, Source, and	Pertinent Pages)		C	DATE
						
	· · · · · · · · · · · · · · · · · · ·					
	•				-	

1 1 1 1	Λ	·	DATE CONSIDERI			
- Wil			7/27	105		
	DOCUMENT NO. 4,285,409 4,776,413 5,285,409 5,291,807 DOCUMENT NO.	DOCUMENT NO. DATE	10/765,746 Docket Number Docket Number	10/765,748 Shilin Chen	### Top	10/765,746 Shilln Chen Docket Number Group Art Unit Filing Date In an Application MAN 2 3 705 074263 0211 3672 January 27, 2 January 27,

U.S. PATENT AND TRADEMARK OFFICE

Page 1 of 1 Application No. PTO-1449 Shilin Chen 10/765.746 Group Art Unit Filing Date Information Disclosure Citation **Docket Number** in an Application January 27, 2004 3672 074263.0211 U.S. PATENT DOCUMENTS JUN 1 3 2005 **SUBCLASS** FILING DATE CLASS NAME OCUMENT NO. DATE 3/9/35 71 255 TRADEY 4/21/36 F.L. Scott et al. 2038386 8/3/81 142 285 4455040 6/19/84 Shinn R 5/19/86 329 175 Hall et al. 4/19/88 4738322 C. **6**/15/93 374 Cawthorne et al. 175 5351770 10/4/94 D. 08/31/94 57 175 Williams 05/07/96 5513711 E. 06/05/95 375 Bird 175 12/3/96 5579856 F. 08/08/94 175 331 Huffstutler 01/21/97 5595255 G 01/03/95 331 175 Shamburger, Jr. 06/10/97 5636700 5/15/95 309 Packer et al. 5697994 12/16/97 1. 6/20/97 374 175 10/19/99 Garcia et al. 5967245 J. 73 12/22/99 Mensa-Wilmot et al. 175 K. 6308790 10/30/01 4/1/99 374 175 8/19/03 Swadi et al. 6607047 L. /31/0 57 175 Singh et al. 9/16/03 M. 6619411 385 3/25/02 175 Mensa-Wilmot 6729420 5/4/04 N. 3/25/04 97 700 Centala et al. 12/16/04 0. 2004/0254664 10 7/13/04 703 Centala et al. 2005/0015230 1/20/05 FOREIGN PATENT DOCUMENTS TRANSLATION **CLASS SUBCLASS** COUNTRY DOCUMENT NO. DATE YES NO X 10/08 E218 2305195 A 4/2/97 GB Q. 10/16 Х E21B GB 6/4/01 R. 2363409 A Х 10/16 E21B GB 2/27/02 S. 2365899-A **NON-PATENT DOCUMENTS** DATE **DOCUMENT (Including Author, Title, Source, and Pertinent Pages)** Drawing No. A46079 Rock Bit and Hole Opener; Security Engineering Co., Inc., Whittier, California 09/14/46 Τ. 1974 U. "Machino Export", Russia, 4 pages R.K. Dropek, "A Study to Determine Roller Cone Cutter Offset Effects at Various Drilling Depths" 8/1/79 American Society of Mechanical Engineers. 10 pages. U.S. Petert application Senal No. 19/325-666 filed December 48, 2002 by John G. Dennis, entitled **Eilest** 12/10/02 Drilling with Mixed Feeth Types.

EXAMINER MILITILE

DATE CONSIDERED

4/22/2005

EXAMINER: Initial of citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

U.S. PATENT AND TRADEMARK OFFICE

British Search Report for GB Patent Application No. 0504304.7, 4 pgs

3W X.

•				
	D.	200	• •	of
		ъу,	7 T	u

PT	D-144	<u>. </u>		Application No.	Applicant(s)		• • •	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Info	rmation Disclos	ure Citation	10/765,746 Docket Number		Shilin Chen Group Art Unit Filing Date			
51	PE	in an Applica							
		<u> </u>		074263.0211 3672 Janu		Januar	uary 27, 2004		
	9 2005	No.		U.S. PATENT DOCUMENTS	S		1		
	6	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE		
RAD	MAIM	W 5,853,245	12/29/98	Price	384	. 96	=46	¥1/97—	
	В. /						ļ		
	C.						ļ		
	D.						-		
	Ε.						ļ		
	F.				,		ļ		
	G.						ļ		
	Н.						ļ		
	1.	· · · · · · · · · · · · · · · · · · ·					ļ		
	J.	·					ļ		
	к.							<u>.</u>	
			FC	DREIGN PATENT DOCUME	NTS				
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	YES	SLATION NO	
yw	L.	2327962	2/10/99	GB	E 21 B	10/16	. X		
3:41	M.	2388857	11/26/03	GB	E 21 B	10/16	×		
	N.								
	O.								
				NON-PATENT DOCUMENT	s				
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)						DATE		
\mathcal{I}	Pr.	Notification of British Search Report for Application No. GB 0503934.2, (3 pages)					5/1	5/16/2005	
	Q.				······································	· · · · · · · · · · · · · · · · · · ·			
	R.	·				······································			
	s.						 		
			·						
	Т.								
EXA	EXAMINER DATE CONSIDERED 7/27/8								
EXA	MINER	: Initial if citation considere	d, whether or not citation	n is in conformance with MPEP	§ 609. Draw line throug	h citation if not in cor	nformance	and not	

U.S. PATENT AND TRADEMARK OFFICE